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Monthly Statistical Report

Prepared by the Finance, Accounting, and Statistics Department

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SUMMARY

Total refined product deliveries grew year to year in February but, as was the case in December and January, the growth resulted primarily from the extreme weakness a year ago. February's 2.5 percent growth came against what were the lowest February deliveries in five years. Examined instead on a month-to-month basis and adjusted for typical seasonal variation, there has been no real sign of strengthening in deliveries since mid-1991. In light of the continuing longer-term trend towards greater conservation and switching away from petroleum, such flat performance would not have been unexpected, even with modest economic growth.

For individual products, results were mixed. Deliveries of gasoline and distillate were up, year to year, albeit at rates greater than underlying consumption trends would indicate. Gasoline's 3.0 percent year-to-year increase contrasted with an estimated 1-2 percent increase in consumption, while distillate's 9.3 percent increase was more than twice what growth in transportation and heating use would suggest. Jet fuel's 5.1 percent deliveries' decline, because of contrasts in non-primary inventory patterns with last year, diverged from an estimated increase in miles flown of a comparable magnitude. Meanwhile, with inexpensive and plentiful natural gas supplies, residual fuel deliveries fell 9.6 percent from already depressed levels a year ago, reaching the lowest February level in over 40 years.

Domestic crude production fell about 250 thousand B/D, or 3.4 percent, during February. While the decline was roughly in line with the trend we had been estimating in recent months, the year-to-year drop was nonetheless the sharpest such decline in nearly a year and a half. Roughly 60 percent of the decline occurred in the lower 48, with a disproportionate share of that believed to have been onshore.

Uncertainty over the direction of world oil markets is believed to have influenced February's imports, refinery activity, and inventory patterns, as refiners and importers appeared reluctant to hold excess inventories. So far as imports are concerned, February's total was little changed from that of a year ago; however, given trends in production and deliveries, imports for the month were nearly a million B/D below what we estimate underlying needs to have been, net of stock changes and seasonal patterns.

As for refinery activity, inputs fell a sharp 5.1 percent, year to year, reaching their lowest level for any month in nearly five years. Production of distillates, jet fuel, and residual fuel oil all fell more sharply than the decline in inputs. Only gasoline production remained relatively strong, growing 3 percent, year to year.

Total petroleum inventories dropped more than is typical during February. The month's 24 million barrel decline brought total stocks to essentially the same levels as a year ago, when they had reached their lowest level for the month in over a decade. Crude inventories rose 7 million barrels during the month, while product inventories, led by the nearly 20 million barrel drop in distillate stocks, fell 32 million barrels.

PRODUCT SUPPLIED[1/]

Gasoline

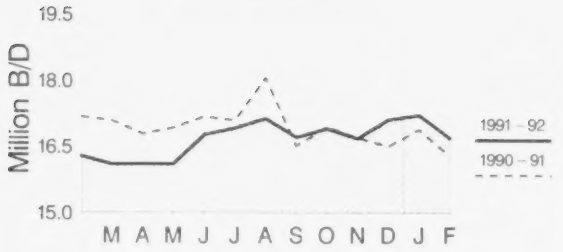
TRAVEL WEAKER THAN DELIVERIES SUGGEST.

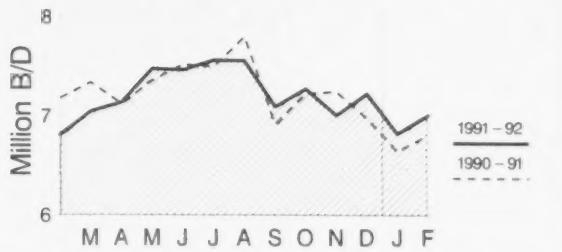
Year-to-year increases for gasoline deliveries over the past three months have averaged around 3 percent, but consumption indicators do not suggest a growth trend in actual usage of such a magnitude. Part of February's 3 percent increase was the result of exceptionally weak deliveries a year ago—the weakest February in four years. Part is also because deliveries this February appear to have been a bit above the recent trend.

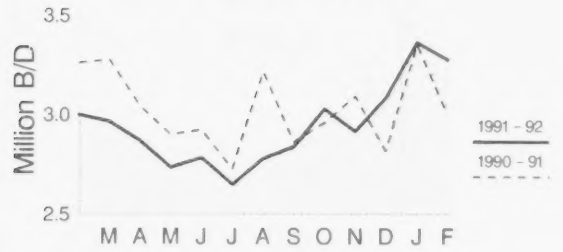
Data on travel suggest that any year-to-year increase in consumption would have been smaller. Though December's miles traveled were up an unusually large 4.4 percent, year to year, travel over the fourth quarter as a whole was up only about 2.5 percent. If this trend continued into 1992, a year-to-year increase in the neighborhood of 3 percent in travel for February would have been expected, other things equal, translating into an increase of 1 to 2 percent in gasoline demand from depressed levels of a year ago.

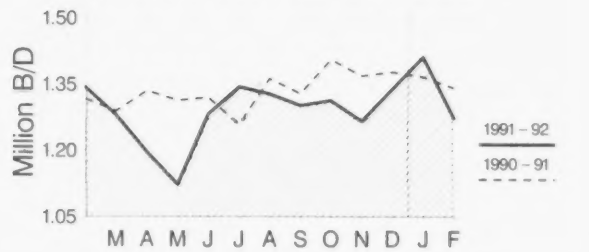
Demand may have also been given a small boost by unseasonably warm weather over the past several months because of conditions more hospitable to driving. We estimate that this could have added to the year-to-year comparison as much an additional half a percent.

	API ESTIMATES FEBRUARY		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	16.7	2.5	17.0	2.2
Crude production[2/]	7.3	(3.4)	7.3	(2.2)
Total imports[3/]	6.9	0.6	7.1	2.5
Stocks (million bbl)[3/]	993	0.1	na	na









Retail gasoline prices fell again in February to a monthly average of about $1.05 per gallon for unleaded regular. This was down about 10 cents from a year ago, bringing it to a three year inflation-adjusted low.

Distillates

DEMAND UP MODESTLY, DELIVERIES UP SHARPLY. Colder weather and increased transportation demand helped push distillate deliveries up, year to year, during February. However, the 9.3 percent (or nearly 280 thousand B/D) increase from February a year ago was larger than the estimated increase in underlying consumption. While deliveries for the month were moderately above trend, most of the variance between delivery and consumption growth resulted from below-trend deliveries in February a year ago, when non-primary inventories draws are believed to have been relatively large, and when low jet fuel prices encouraged substitution (via increased blending) of jet kerosine for distillate fuel.

Despite what has so far been the warmest winter on record, and despite the fact that temperatures nationwide during February were almost 20 percent above their long run average, weather for the month was slightly colder than during February a year ago. In the Northeast, degree days climbed more than 10 percent from last February, contributing to the estimated 75 thousand B/D year-to-year increase in heating fuel consumption nationwide.

Transportation demand for the month was up versus last year, as well. Based on recent trends in truck and rail travel, we estimate that diesel demand in each of these sectors climbed by about 4 percent, year to year. Such increases would add perhaps 40 thousand B/D to highway demand and 10 thousand B/D to rail demand compared to last year.

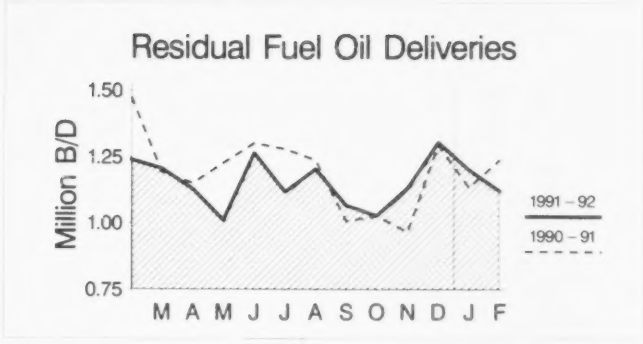
Distorting the year-to-year trend were weak deliveries a year ago. Contributing to that weakness was the unusual price relationship between distillate and jet kerosine seen during the month. Usually trading at a premium to distillate fuel, jet kerosine prices plunged last February following early Allied air success in the Gulf War, and amid extremely weak jet fuel demand in the commercial aviation sector. By mid-February 1991, jet fuel was actually trading at a 6-7 cents/gallon discount to distillate fuel. The anomalous price relationship is believed to have encouraged additional blending of jet kerosine with diesel and heating fuel, thus suppressing distillate deliveries.

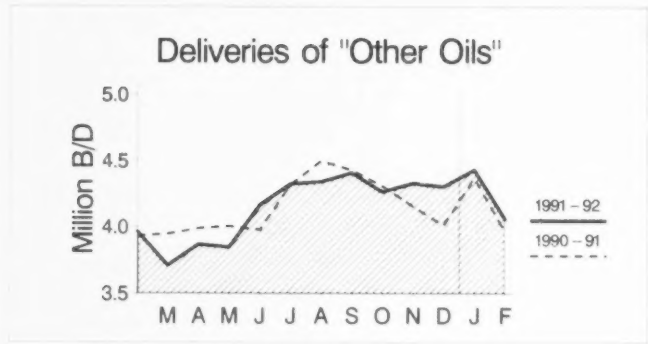
Contrasts in non-primary inventory patterns this year versus last also help explain the variance between growth in deliveries and growth in consumption. Secondary heating fuel inventories were reportedly high heading into February a year ago, and declined 3-4 percent during the month. In contrast, secondary heating fuel inventories are reported to have actually increased by about 2 percent during this February.

Kerosine Jet Fuel

DELIVERIES FALL DESPITE GROWTH IN AIR TRAVEL. In contrast to the year-to-year increase in miles flown by commercial airlines, jet kerosine deliveries fell 5.1 percent, February to February. The decline resulted in part from above-trend deliveries a year ago when (as was discussed in the distillate section) particularly low jet fuel prices encouraged more blending with diesel and heating fuel. Putting last year aside, however, deliveries this February were still at a five-year low for the month, suggesting that non-primary inventories were drawn more than usual this February.

Commercial air travel is generally the best indicator of underlying jet fuel consumption. Typically already at a seasonal low during February, miles flown on commercial airlines were particularly weak in February 1991 following the outbreak of hostilities in the Persian Gulf. While air travel's late 1991 recovery appears





to have stalled in the last month or two, miles flown grew by an estimated 5-6 percent, year to year, during the month, primarily because of last February's weakness.

Non-primary inventory draws during the month, perhaps made possible by above trend deliveries during January, and perhaps spurred by uncertainty over the direction of future prices, may have contributed to February's relatively low delivery level. Over the course of the month, jet fuel prices fell 3-4 cents per gallon, perhaps encouraging purchasers to postpone deliveries.

Residual Fuel Oil

DOWN ANOTHER 10 PERCENT FROM YEAR-AGO LOWS. Deliveries of residual fuel oil fell 9.6 percent, year to year, during February. At 1.12 million B/D, they were at their lowest February level in over 40 years. Inexpensive natural gas, made more abundant by moderate winter weather and increased deliverability from Canada, contributed to the month's weakness. While February's decline reversed five consecutive months of year-to-year increases, those increases had resulted largely from comparisons against crisis-related lows in the prior year period. Seasonally-adjusted deliveries, by our estimates, have been falling since late last summer.

Although more moderate than normal nationwide, weather was slightly colder this February than last. However, while the year-to-year increase in degree days contributed to a 3-4 percent increase in electricity generation in the New England and Mid Atlantic states (where the nation's resid-fired generation is concentrated), it is thought that most incremental power demand in these states was satisfied via increasingly economical natural gas.

Contributing to natural gas's competitiveness vis-a-vis resid in the Northeast during February was the expanded operation of the Iroquois Gas Transmission System from Canada during the month. Operating at only about a third of its 576 million cf/d capacity during December and January, capacity utilization doubled from this average during February. With residential and commercial natural gas demand believed to be relatively insensitive to new sources of supply in the short run, most incremental gas supplies arriving in the region via the Iroquois system are thought to serve industrial and utility needs—in many cases supplanting resid consumption. February's gas deliveries through Iroquois, reportedly about 380 million cf/d could have, in theory, displaced as much as 65 thousand B/D of resid. The degree to which gas actually displaced resid is yet to be determined. However, any resid-to-gas substitution resulting from the pipeline's opening would accelerate the trend rate of decline in resid deliveries, which we have been estimating at about a 6-8 percent annual rate in recent months.

Other Oils

FEEDSTOCK STRENGTH COMPENSATES FOR WARM WEATHER. For February, deliveries of "other oils" rose 2.4 percent. The main factors in the year-to-year increase were likely growth in petrochemical feedstock deliveries, both for ethane and for heavier feedstocks (and gasoil in particular), partially counterbalanced by relative weakness for most other products. Propane demand, though no doubt benefiting in the chemical sector from competitive prices relative to other feedstocks, suffered in the residential/commercial sector from the month's warm weather.

The pattern so far this year apparently continued that of 1991, as evidenced in full-year data for individual products now available from the Department of Energy. The modest 0.8 percent, 30 thousand B/D increase for the year for "other oils" as a whole was again mainly due to 10 percent gains for ethane and gasoil petrochemical feedstocks (amounting to approximately 50 thousand B/D and 40 thousand B/D, respectively), along with a 5 percent, 20 thousand B/D rebound for propane from the prior year's dip. One of the major factors counterbalancing these increases was a drop in asphalt deliveries of about 9 percent or 40 thousand B/D. Deliveries of lubricants, petroleum coke, and naphtha feedstocks, along with production and usage of refinery gases, declined as well.

SUPPLY [1/]

Production

YEAR-TO-YEAR DROP LARGEST SINCE AUTUMN 1990. February's domestic crude oil production fell, year to year, by the largest amount in nearly a year and a half. Down more than 250 thousand B/D or 3.4 percent from last year's high point in February, the decline was roughly in line with the estimated current decline trend for domestic crude oil output. Production fell 100 thousand B/D in Alaska and about 150 thousand B/D in the lower 48.

Despite the current decline trend onshore, offshore crude oil production has been boosted, at least temporarily, by several developments in the Gulf of Mexico and offshore California. Offshore production from existing fields had been declining at an average rate of over 5 percent per year between 1986 and 1990—slightly faster than the corresponding rate onshore. However, early in 1991, production began rising and month-to-

month increases continued through most of the year, with preliminary estimates of production rising to nearly 1.1 million B/D in October compared to 960 thousand B/D in October 1990.

For offshore Louisiana, most of the increase of roughly 40 thousand B/D can be attributed to two deepwater projects in the Gulf of Mexico. Cognac platform had been shut in for redevelopment in mid-1989. In March of 1991 production resumed from several of the developed wells with the remainder coming on stream by year end. This increased production by as much as 17 thousand B/D. Also, production began increasing from Bullwinkle platform in August after permanent production facilities were installed. Bullwinkle platform, in 1,353 feet of water, is currently the world's tallest fixed offshore structure.

In California, a major component of the offshore increase late last year was from Point Arguello, which had begun production last June. Production from Point Arguello showed gains through October and has leveled off at about 35 thousand B/D.

Thus, were it not for the mitigating effects of increased production offshore, lower 48 production would be declining by more than the aggregate figures suggest. Although available data breaking out offshore and onshore production are often revised and, in any event, are not available for the most recent months, the evidence suggests than onshore lower 48 production's decline rate has recently been on the order of 250-300 thousand B/D per year.

Imports

OFF NEARLY A MILLION B/D FROM UNDERLYING NEEDS.

Total imports, though up slightly year to year, were down compared with prior months, to 6.9 million B/D, the lowest level in nearly a year. But the underlying trend in import needs, we estimate, has been running at a substantially greater amount and gradually increasing. February's lower import level contrasted with a recent monthly high of 8.6 million B/D last August and likely reflected reticence to hold excess supplies in the face of uncertainties in world oil markets.

The longer-term trend in import requirements has been running at a significantly higher level than suggested by February's raw imports figure. Based on an analysis of imports adjusted for domestic inventory changes and taking into account typical seasonal patterns in demand and supply, we estimate that the underlying trend in import needs has been running at 7.7-7.8 million B/D—nearly 1 million B/D higher than February's actual imports. With domestic crude oil production dropping, the trend is approaching the underlying requirements of just over 8 million B/D just prior to Iraq's invasion of Kuwait in August 1990.

February's year-to-year rise in product imports of nearly 17 percent may sound substantial enough, but the increase was from February 1990's exceptionally low level of 1.35 million B/D. Product imports then had been the lowest in nearly ten years because of weak domestic demand and high foreign prices relative to domestic sources. This February, at 1.57 million B/D, they differed little from January's level and were actually lower than during the second half of 1991 by about 285 thousand B/D.

Individual products followed a similar pattern. Imports of finished gasoline at 242 thousand B/D, distillates at 195 thousand B/D, kerosine jet fuel at 46 thousand B/D, and residual fuel oil at 422 thousand B/D, were all up substantially from year ago levels but weaker than in the second half of 1991.

Refinery Operations

WEAKEST ACTIVITY IN 5 YEARS, BUT GASOLINE OUTPUT UP.

Refinery activity, which had begun to slacken off during January, fell considerably during February. The 5.1 percent year-to-year decline in total inputs to distillation units brought this measure of refinery activity to its lowest level for any month in nearly five years. With primary inventories falling more than usual for February, and with crude and product prices falling throughout much of the month, it is believed that refiners cut throughput to lessen the price risks of holding excess inventories.

Despite the nearly 670 thousand B/D year-to-year drop in refinery inputs, gasoline production remained relatively strong, continuing the pattern of the past few months. While gasoline production grew 3 percent, year to year, production of other major products declined sharply. Distillate output was off 6.8 percent, while production of jet kerosine and residual fuel oil fell 14.2 percent and 14.6 percent, respectively, from levels a year ago.

This year's early shift from distillate to gasoline production was prompted by relatively low distillate prices. Moderate weather left primary distillate inventories relatively high at the beginning of the year, and pushed prices down relative to crude and gasoline. In spot markets, gasoline sold at a 2-4 cents per gallon premium over distillate throughout the month, in contrast to the 2-4 cents per gallon discount of last February.

Not surprisingly, the sharp drop in refinery inputs translated into a decline in refinery utilization rates. Utilization, as measured either in terms of capacity in operation, or in terms of reported capacity, fell more than 4 points from rates a year ago. At 82.9 percent and 79.9 percent, respectively, both were at their lowest levels since March 1987.

Inventories

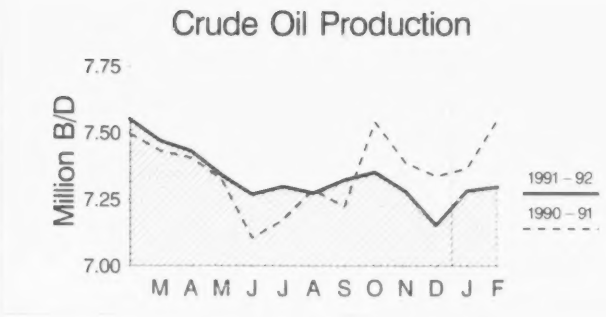
DISTILLATE STOCKS FALL; TOTAL STOCKS MATCH YEAR-AGO LOW.

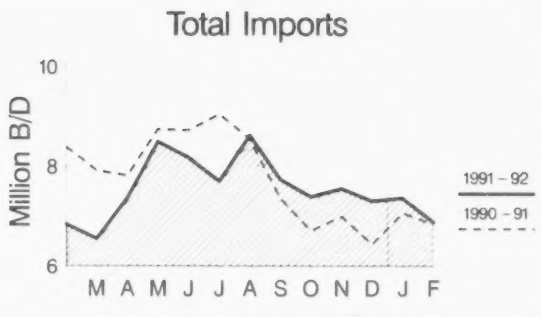
Total stocks continued to drop more than seasonally in February. Over the past two months, they have fallen more than 50 million barrels versus a more typical 10-15 million barrels suggested by historical data. At 993 million barrels, they were nearly identical to year-ago levels which had been the lowest February level in more than a decade.

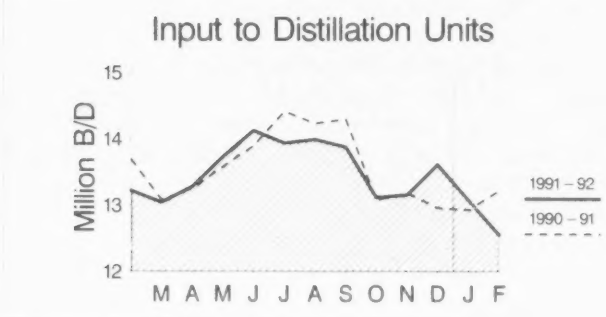
Last February's low level had been the result of the greater reliance on domestic inventories during the Persian Gulf crisis after the loss of Kuwaiti and Iraqi oil to world markets. This February's low level, however, apparently reflected reluctance to hold excess inventories in the face of uncertainty about the direction of world oil markets.

Among the major products, distillate fuel oil's nearly 20 million barrel drop from January accounted for much of product stocks' 32 million barrel decline. Though distillate's drop was greater than the historical average of about 13 million barrels, it served mainly to bring distillate stocks, which had been at a five-year December high two months previously, down to a level more in line with historical month-end levels.

Gasoline stocks changed little over the month; at 228 million barrels they were 7 million barrels above year-ago levels but about 10 million barrels under the recent-year average. Crude stocks rose 7 million barrels during the month to 342 million barrels, a not atypical level for crude stocks for February.







1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 569 million barrels as of Februaruy 29, 1992).

ESTIMATED UNITED STATES PETROLEUM BALANCE
(Daily Average in Thousands of 42 Gallon barrels)

Products Supplied/Supply From Primary Storage	FEBRUARY			YEAR-TO-DATE		
	1992/1	1991/2	% Change	1992/3R	1991/2	% Change
Products Supplied:						
Total motor gasoline	7,009	6,806	3.0	6,912	6,720	2.9
Finished leaded motor gasoline/*	149	214	(30.4)	148	249	(40.6)
Finished unleaded motor gasoline/*	6,860	6,592	4.1	6,764	6,471	4.5
Naphtha-jet	164	181	(9.4)	162	181	(10.5)
Kerosine-jet	1,274	1,342	(5.1)	1,345	1,355	(0.7)
Distillate fuel oil	3,279	3,000	9.3	3,323	3,187	4.3
Residual fuel oil	1,120	1,239	(9.6)	1,162	1,183	(1.8)
All other oils/4	4,057	3,963	2.4	4,250	4,178	1.7
Reclassified/5	-213	-247	(13.8)	-195	-206	(5.3)
Total domestic products supplied	16,690	16,284	2.5	16,959	16,598	2.2
Exports	1,072	1,441	(25.6)	994	1,314	(24.4)
Total products supplied	17,762	17,725	0.2	17,953	17,912	0.2
Supply:						
Domestic production:						
Crude oil/6	7,299	7,552	(3.4)	7,291	7,453	(2.2)
Natural gas liquids	1,711	1,690	1.2	1,697	1,661	2.2
Other supply/7	1,027	1,348	(23.8)	979	1,080	(9.4)
Total domestic supply	10,037	10,590	(5.2)	9,967	10,194	(2.2)
Imports:						
Crude oil, total/8	5,317	5,498	(3.3)	5,575	5,396	3.3
Canadian	816	877	(7.0)	834	795	4.9
Other	4,501	4,621	(2.6)	4,741	4,601	3.0
Products, total	1,571	1,346	16.7	1,563	1,565	(0.1)
Residual fuel oil	422	384	9.9	375	404	(7.2)
Other	1,149	962	19.4	1,188	1,161	2.3
Total imports	6,888	6,844	0.6	7,138	6,961	2.5
Total supply	16,925	17,434	(2.9)	17,105	17,155	(0.3)
Stock change, all oils	-837	-291	******	-848	-757	******
Refinery Operations						
Input to crude oil distillation units	12,549	13,218	(5.1)	12,822	13,066	(1.9)
Operable capacity	15,709	15,662	0.3	15,709	15,666	0.3
Refinery utilization (%)/9	79.9	84.4	(5.3)	81.6	83.4	(2.2)
Crude oil runs	12,401	13,052	(5.0)	12,650	12,881	(1.8)

Stocks (millions bbls.)	1992/10		1991/2	% Change from	
	Feb. 29/10	Jan. 31/10	Feb. 28	Previous Month	Year Ago
Crude oil/8	341.8	334.4	331.2	2.2	3.2
Unfinished oils	102.1	100.7	104.5	1.4	(2.3)
Total motor gasoline/**	228.4	229.8	221.9	(0.6)	2.9
Finished leaded motor gasoline/*	4.7	5.5	10.5	(14.5)	(55.2)
Finished unleaded motor gasoline/*	184.9	186.6	170.4	(0.9)	8.5
Naphtha-jet	4.6	4.6	5.9	0.0	(22.0)
Kerosine-jet	38.3	40.1	42.1	(4.5)	(9.0)
Distillate fuel oil	107.6	127.2	101.3	(15.4)	6.2
Residual fuel oil	43.1	43.9	44.6	(1.8)	(3.4)
All other oils	127.5	137.0R	141.4	(6.9)	(9.8)
Total all oils	993.4	1,017.7R	992.9	(2.4)	0.1

/1 Based on API estimated data converted to a monthly basis.
/2 Source: U.S. Department of Energy.
/3 API.
/4 Includes crude losses.
/5 Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from the total domestic products supplied.
/6 API estimate; includes lease condensate.
/7 Includes Unaccounted-for crude oil, which will reflect withdrawls from the SPR when they occur, processing gain, field production of other hydrocarbons and alcohol.
/8 Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
/9 Represents "Input to crude oil distillation units" as a percent of "Operable capacity".
/10 Derived by interpolating API weekly stocks data.
/R Revised.
/* Included in motor gasoline.
/** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.